

1 **(BSP September 27, 2004)**

2 **Cylindrical Bearing**

3 Unless other materials are specified in the Plans, cylindrical bearing assembly
4 components shall conform to the following requirements for those components shown
5 and specified in the Plans:
6

7 **Steel Plates and Bars**

8 Steel plates and bars (base plates, bearing plates, guide bars, masonry plates, and
9 sole plates) shall conform to ASTM A 36, and the dimensions shall comply with the
10 details as shown in the Plans. The surface of the steel plates and bars in contact
11 with stainless steel shall have an average surface roughness of 125 microinches or
12 less. The surface within the recess of steel plates and bars retaining PTFE shall
13 have an average surface roughness of 250 microinches or less. All other steel
14 plate and bar surfaces in contact with other cylindrical bearing assembly
15 components shall have an average surface roughness of 500 microinches or less.
16

17 **Polytetrafluoroethylene (PTFE)**

18 PTFE shall be 100 percent virgin PTFE, woven PTFE fabric, or dimpled PTFE
19 conforming to Section 18.8.2 of the AASHTO LRFD Bridge Construction
20 Specifications, 1st Edition and latest interims.
21

22 **Stainless Steel**

23 Stainless steel sheet shall conform to ASTM A 240 Type 304L. Stainless steel in
24 contact with PTFE shall be polished to a Number 8 mirror finish.
25

26 Stainless steel countersunk screws shall be hexagon socket type conforming to
27 ANSI B 18.3 and shall conform to ASTM F 593 Type 304L.
28

29 **Silicone Grease**

30 Silicone grease shall conform to Military Specification MIL-S-8660.
31

32 **Bolts, Nuts and Washers**

33 Bolts, nuts and washers shall conform to Section 9-06.5(3).
34

35 **Anchor Bolt Assembly**

36 Anchor bolts shall conform to ASTM F 1554 Grade 105, including supplemental
37 requirements S2, S3, and S5. Nuts shall conform to AASHTO M 291 Grade DH.
38 Washers shall conform to AASHTO M 293. Bars shall conform to ASTM A 36.
39 Pipe shall conform to ASTM A 53 Grade B Type E or S, black.
40

41 **Resin Filler**

42 Resin filler shall conform to Section 6-02.2 as supplemented in these Special
43 Provisions.
44

45 **Submittals of Acceptance Test Reports and Certificates**

46 The Contractor shall submit the following production samples, and test reports and
47 certificates, to the Engineer for review, testing, and approval:
48

- 49 1. Manufacturer's certificate of compliance for the PTFE, resin filler, and
50 silicone grease, in accordance with Section 1-06.3.
51

1
2
3
4
5
6
7
8
9

2. A two inch by three inch by 1/8 inch sample of PTFE taken from the lot of production material.
3. Certified mill test reports for all steel and stainless steel materials incorporated in the bearings.

The Contractor shall not ship the bearings from the fabricator's facility until receiving the Engineer's written approval of all production samples, and test reports and certificates.